

INITIAL STATEMENT OF REASONS AND PUBLIC REPORT
DEPARTMENT OF PESTICIDE REGULATION

Title 3. California Code of Regulations
Amend Section 6860
Pertaining to Toxic Air Contaminants

This is the Initial Statement of Reasons required by Government Code section 11346.2 and the public report specified in section 6110 of Title 3, California Code of Regulations (CCR). Section 6110 meets the requirements of Title 14 CCR section 15252 and Public Resources Code section 21080.5 pertaining to certified state regulatory programs under the California Environmental Quality Act.

SUMMARY OF PROPOSED ACTION / PESTICIDE REGULATORY PROGRAM
ACTIVITIES AFFECTED

The Department of Pesticide Regulation (DPR) proposes to amend Title 3 CCR section 6860. The pesticide regulatory program activities that will be affected by the proposal are those pertaining to air monitoring and evaluation under its general reevaluation mandate and under the mandates of Assembly Bill 1807 (Chapter 1047, Statutes of 1983, and amended by Chapter 1380, Statutes of 1984, AB 3219), the Toxic Air Contaminant Act. In summary, this action would designate the pesticide chemical methyl isothiocyanate (MITC) and other pesticides that generate MITC as toxic air contaminants (TACs) pursuant to Food and Agricultural Code (FAC) section 14023. The action would also add four pesticide chemicals to subsection (b) of section 6860 pursuant to FAC section 14021: cacodylic acid, carbon disulfide-generating pesticides, 10 10' oxybisphenoxysarsine, and phosphine and phosphine-generating pesticides.

SPECIFIC PURPOSE AND FACTUAL BASIS

With the enactment of California's Toxic Air Contaminant Act, the Legislature created the statutory framework for the evaluation and control of chemicals as TACs. The statutes are contained in FAC sections 14021-14027. FAC section 14021 defines a TAC as "an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health."

DPR evaluates pesticides as TACs pursuant to FAC section 14022. FAC section 14022 requires the evaluations to be conducted in consultation with the Office of Environmental Health Hazard Assessment (OEHHA) and the Air Resources Board. Upon completion of a pesticide evaluation, FAC section 14023(a) requires DPR, in consultation and with the participation of OEHHA, to prepare a report on the health effects of the pesticide due to airborne emissions resulting from its use. The report assesses the availability and quality of data on health effects, including potency, mode of action, and other relevant biological factors, of the substance. The report must include OEHHA's written findings. FAC section 14023(b) requires a review of the report by a panel of independent scientists known as the Scientific Review Panel (SRP). The SRP reviews the scientific data upon which the report is based, the supporting scientific procedures and methods used, and the conclusions and assessments on which the report is based. The SRP then submits

its written findings to DPR. Based on the results of this comprehensive evaluation and review, the law requires the DPR Director to determine whether the candidate pesticide is a TAC. Title 3 CCR section 6890 provides the criteria the Director must use. If the candidate pesticide is determined to be a TAC, FAC section 14023(d) requires the Director to list that pesticide as a TAC in regulation.

MITC is a general biocide used to control weeds, nematodes, and soil and wood fungi. Although MITC is no longer registered for use in production agriculture in California, two liquid formulations are registered for use as wood treatments.

MITC is the primary breakdown product of three other pesticides--the soil fumigants metam-sodium, metam-potassium, and dazomet. On contact with warm, moist soil, these pesticides decompose quickly to MITC and other volatile gases, which diffuse through the spaces in the soil, and account for the fumigant activity of these soil sterilants. The primary source of MITC in the environment due to pesticide use is from the breakdown of metam-sodium.

DPR has conducted an evaluation and risk assessment of MITC. It is contained in the report "Evaluation of Methyl Isothiocyanate as a Toxic Air Contaminant." This report is listed in the "Documents Relied Upon" section of this initial statement of reasons and is available from DPR.

The SRP has reviewed the MITC report and submitted its written findings to DPR (August 8, 2002). In its findings, the SRP concluded:

The Panel has reviewed the draft version of the DPR report 'Evaluation of Methyl Isothiocyanate (MITC) as a Toxic Air Contaminant,' as well as the scientific procedures and methods used to support the data, the data itself and the conclusions and assessments on which the report is based. The Panel has also reviewed and considered public comments including those submitted by the Metam Sodium Task Force, and agency responses to comments. The Panel concludes that the report, with the revisions specified by the SRP, is based upon sound scientific knowledge, and represents a balanced assessment of our current scientific understanding.

The Panel recommends that the Director of DPR initiate regulatory steps to list MITC as a Toxic Air Contaminant pursuant to FAC § 14023(d). In addition, because MITC in air derives overwhelmingly from applications of metam sodium, with a smaller part contributed by metam potassium and dazomet, we recommend that these three pesticides be listed as TACs. Other pesticides, not noted in this document, that break down to MITC should also be identified as TACs. Other breakdown products resulting from metam sodium use must also be considered. MIC and CS₂ are automatically listed as TACs due to their status as Hazardous Air Pollutants.

Hydrogen sulfide should be identified as a TAC, based on its known toxicity and release as a breakdown product of metam sodium.

Based on the results of the evaluation of MITC, the findings of the SRP, and the criteria listed in Title 3 CCR section 6890 for identifying pesticides as TACs, the Director has declared MITC to be a TAC (DPR, 2002).

The proposed regulatory action adds MITC and other pesticides that generate MITC to section 6860(a).

Existing subsection (b) contains a list of pesticides that have been designated as TACs pursuant to FAC section 14021. FAC section 14021 provides that, "Pesticides which have been identified as hazardous air pollutants pursuant to section 7412 of Title 42 of the United States Code shall be identified by the Director as toxic air contaminants." DPR proposes to list four compounds as TACs on the basis of their listing as federal hazardous air pollutants and their presence in pesticides currently registered for use in California. These compounds include cacodylic acid, carbon disulfide-generating pesticides, 10 10' oxybisphenoxyarsine, and phosphine and phosphine-generating pesticides.

CONSULTATION WITH OTHER AGENCIES

As described above, DPR has consulted with OEHHA and the Air Resources Board. In addition, DPR has consulted with the California Department of Food and Agriculture during the development of the text of proposed regulations as specified in FAC section 11454.2, and the February 6, 1992, Memorandum of Agreement which was developed as provided in section 11454.2.

Copies of correspondence with these agencies are contained in the rulemaking file.

ALTERNATIVES TO THE PROPOSED REGULATORY ACTION (GOVERNMENT CODE SECTION 11346.2(b))

DPR has not identified any feasible alternatives to the proposed regulatory action that would lessen any possible adverse economic impacts, including any impacts on small businesses, and invites the submission of suggested alternatives.

IDENTIFICATION OF ANY SIGNIFICANT ADVERSE ENVIRONMENTAL EFFECT THAT CAN REASONABLY BE EXPECTED TO OCCUR FROM IMPLEMENTING THE PROPOSAL

The proposal in effect pertains to designating the pesticide chemical MITC and pesticides that generate MITC as TACs in section 6860(a) and four federally-listed compounds as TACs in section 6860(b). DPR's review of the proposed action showed that no significant adverse environmental effect to California's air, soil, water, plants, fish, or wildlife can reasonably be expected to occur from implementing the proposal. Therefore, no alternatives or mitigation measures are proposed to lessen any significant adverse effects on the environment.

EFFORTS TO AVOID UNNECESSARY DUPLICATION WITH FEDERAL REGULATIONS

The proposed regulatory action does not duplicate or conflict with the Code of Federal Regulations.

DOCUMENTS RELIED UPON

1. DPR. 2002. *Evaluation of Methyl Isothiocyanate as a Toxic Air Contaminant - Executive Summary*. Report No. TAC-2002-01EX, Department of Pesticide Regulation, Sacramento, California.
2. Wales, Pamela C. 2002. *Evaluation of Methyl Isothiocyanate as a Toxic Air Contaminant - Part A: Environmental Fate*. Report No. TAC 2002-01A, Department of Pesticide Regulation, Sacramento, California.
3. Thongsinthusak, Thomas, Ph.D. *Evaluation of Methyl Isothiocyanate as a Toxic Air Contaminant - Part B: Public Exposure to Airborne Methyl Isothiocyanate in California*. Report No. TAC 2002-01B, Department of Pesticide Regulation, Sacramento, California.
4. Rubin, Andrew L., Ph.D. 2002. *Evaluation of Methyl Isothiocyanate as a Toxic Air Contaminant - Part C: Human Health Assessment*. Report No. 2002-01C, Department of Pesticide Regulation, Sacramento, California.
5. OEHHA. 2002. *Office of Environmental Health Hazard Assessment's (OEHHA's) Draft Findings on the Health Effects of Methyl Isothiocyanate*. OEHHA, February 2002.
6. Froines, J.R. 2002. *Scientific Review Panel Findings on Metam Sodium and Other Pesticidal Sources of Methyl Isothiocyanate*. Findings of the Scientific Review Panel, John R. Froines, Ph.D., Chair. August 7, 2002.

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7. DPR. 2002. *Notice of Proposed Decision Concerning the Director's Declaration of Methyl Isothiocyanate (MITC) and Other Pesticides That Generate MITC as Toxic Air Contaminants*. Paul E. Helliker, Director, Department of Pesticide Regulation. August 23, 2002.
8. Title 42 United States Code, Section 7412